

PATENT  
USSN 09/990,080  
Docket 018/258c

CLAIM AMENDMENTS

1. *(Previously presented)* A polypeptide encoded by DNA that hybridizes to a sequence complementary to SEQ. ID NO:1 at 5°C to 25°C below  $T_m$  in aqueous solution at 1 M NaCl, wherein  $T_m$  is the melting temperature of double-stranded DNA having the sequence of SEQ. ID NO:1 under the same reaction conditions;

wherein said polypeptide has one or more of the following deletions:

- a) residues 560-565,
- b) residues 930-934,
- c) at least 10 consecutive amino acids from residues 326-415,
- d) at least 10 consecutive amino acids from residues 637-660,
- e) at least 10 consecutive amino acids from residues 748-766,
- f) at least 10 consecutive amino acids from residues 1055-1071, or
- g) at least 10 consecutive amino acids from residues 1084-1116

of SEQ. ID NO:2;

and wherein said polypeptide inhibits telomerase enzyme activity when introduced into a cell expressing human telomerase reverse transcriptase (hTERT) (SEQ. ID NO:2).

2 and 3. **CANCELLED**

4. *(Currently amended)*

A polypeptide lacking telomerase enzyme activity, wherein said polypeptide comprises full-length hTERT (SEQ. ID NO:2), except for one or more deletions(s) that include:

- a) residues 560-565,
- b) residues 930-934,
- c) at least 10 consecutive amino acids from between residues 323-450,
- d) at least 10 consecutive amino acids from between residues 637-660,
- e) at least 10 consecutive amino acids from between residues 748-766,
- f) at least 10 consecutive amino acids from between residues 1055-1071, or
- g) at least 10 consecutive amino acids from between residues 1084-1116.

5. *(Currently amended)* A polypeptide lacking telomerase enzyme activity, wherein said polypeptide comprises full-length hTERT (SEQ. ID NO:2), except for one or more deletions(s) consisting essentially of residues 560-565, 930-934, 326-415, 637-660, 748-766, 1055-1071, or 1084-1116,

wherein said polypeptide lacks telomerase catalytic activity and

and wherein said polypeptide inhibits telomerase enzyme activity when introduced into a cell expressing hTERT.

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6 to 9. **CANCELLED**

10. *(Original)* A method of inhibiting telomerase catalytic activity, comprising introducing a polypeptide according to claim 1 into an environment containing telomerase reverse transcriptase.

11. **CANCELLED**

12. *(Currently amended)* A method of inhibiting telomerase catalytic activity in a cell, comprising expressing in the cell a nucleic acid encoding ~~a protein, peptide, a polypeptide~~ according to ~~claim 2~~ claim 1.

13 to 21. **CANCELLED**

22. *(Withdrawn) (Currently amended)* A method of producing an inactive variant of telomerase reverse transcriptase in a cell, comprising transfecting the cell to express a polypeptide according to ~~claim 2~~ claim 1.

23. *(New)* A method of inhibiting telomerase catalytic activity, comprising introducing a polypeptide according to claim 4 into an environment containing telomerase reverse transcriptase.

24. *(New)* A method of inhibiting telomerase catalytic activity in a cell, comprising expressing in the cell a nucleic acid encoding a polypeptide according to claim 4.

25. *(New)* A method of producing an inactive variant of telomerase reverse transcriptase in a cell, comprising transfecting the cell to express a polypeptide according to claim 4.

26. *(New)* A method of inhibiting telomerase catalytic activity, comprising introducing a polypeptide according to claim 5 into an environment containing telomerase reverse transcriptase.

27. *(New)* A method of inhibiting telomerase catalytic activity in a cell, comprising expressing in the cell a nucleic acid encoding a polypeptide according to claim 5.

28. *(New)* A method of producing an inactive variant of telomerase reverse transcriptase in a cell, comprising transfecting the cell to express a polypeptide according to claim 5.